# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE APPLICATION FOR UNITED STATES LETTER PATENT

# **FOR**

# IMPROVED BINGO GAME

INVENTOR: SHAWN M. VAN ASDALE

#### IMPROVED BINGO GAME

### TECHNICAL FIELD OF THE INVENTION

This invention relates to a method of playing a bingo-type game. More particularly, the invention relates to a method for allowing a player to use strategy to select or daub a number of bingo balls in a bingo-type game and forgo daubing other balls, thereby adding a new level of player interaction, skill and chance to the game of bingo.

## BACKGROUND OF THE INVENTION

5

10

15

20

25

30

Bingo is one of the most prevalent forms of gaming across the United States. In the United States it is organized by, among others, charity groups and Native American tribes that operate casinos or gambling parlors. Bingo may be played using electronic devices or in its non-electronic form which has existed for several years. In the typical non-electronic form each player purchases at least one bingo card (but often more than one card) that is good for a specified drawing of bingo balls, e.g., the nine o'clock drawing. Each drawing uses a predetermined number of bingo balls, typically 75. The typical bingo card is a five-by-five matrix where each column is identified by a letter, B-I-N-G-O, and at each coordinate in the matrix a number is provided. Typically, the "B" column contains numbers ranging from 1 to 15, the "T" column contains numbers ranging from 16 to 30 and so on. As balls are drawn, the number of the ball is called out and the players determine if their card(s) has the drawn ball. If a player's card(s) has the drawn ball, the player will daub the spot(s) on his card(s) corresponding to the ball. Daubing is often accomplished in the non-electronic game by the use of a special ink marker, but players may use other means to record the selection of a ball on their card(s), including placing an object such as a coin or bean on the spot.

In each bingo game there is one or more pattern that, when completed, will entitle the player who completed it to a prize and that may or may not end the bingo game. A wide variety of patterns have been used in these games. A "simple" pattern may be any horizontal line of five daubed spots. However, there is virtually no limit to the number or complexity of patterns that may be used. For instance, the pattern could be a "kite" which is defined as a four daubs in a square pattern with two daubs in a diagonal line and diagonally touching a point of the square to form the "kite's tail." Thus, the players of the bingo game are competing with each other to

complete the designated patterns. Often, only the first player to complete each pattern is awarded the prize associated with the pattern. In addition to varying the pattern that is used, bingo games may vary the size of the matrix used or the number of bingo balls that are used to provide additional variety and excitement to the game.

5

10

15

20

25

30

Electronic bingo games operate in much the same way as non-electronic games with a few exceptions. The most notable difference in the two types of games is that the electronic bingo balls are drawn much faster and microprocessors determine if a player's bingo card contains a spot that matches a drawn ball. As a result, the players do not daub balls individually. Rather, the player's electronic device or gaming terminal that is being used to play bingo will automatically daub multiple balls for the player at the touch of a button. Thus, it is no longer up to the player to watch the ball draw and determine if any of the balls drawn appear on the player's bingo card. With this electronic setup, all balls drawn that appear on a player's card are either instantly daubed as soon as the ball is drawn or a player may periodically hit a daub button to update multiple balls on his card at once. The ability to draw balls quicker and to almost instantaneously automatically daub spots that match the drawn balls allows players of electronic bingo to play many more bingo games in a given amount of time than with non-electronic bingo. Also, because a computer or other electronic device is used to monitor the bingo game, far more complex bingo patterns can be used than with non-electronic bingo games. These differences between electronic bingo and non-electronic bingo have led to electronic bingo terminals that display, in addition to a bingo card, other entertaining graphics to the player. The most successful such devices display what appears to be a slot machine like those used in Las Vegas. These bingo terminals often determine the amount of a player's win, if any, based on one or more of the following criterion: the number of player's playing the game, the number of balls it took the player to complete a pattern and the specific pattern completed. Once the amount of the win is determined, the portion of the terminal resembling a slot machine is then used to display a combination of slot machine symbols that would correspond to the determined amount.

In the non-electronic form of bingo described above, the player uses a certain amount of skill to recognize that his card or cards contain a spot matching a drawn ball and to daub the spots corresponding to that ball in the time before the next ball is drawn, although there is typically no time limit placed on how quickly a spot must be daubed. Because there is no additional cost associated with daubing a spot and because there is no penalty involved with

daubing a spot that is subsequently not used to complete a bingo pattern, the player will, if he is able, daub every possible spot that he can. Thus the amount of player interaction in non-electronic bingo is very limited. In electronic bingo, a computer determines whether a player's card has a spot that matches or concords with any drawn balls. And for the same reasons as those discussed in non-electronic bingo, there has never been a need in the electronic form of bingo described above to allow a player to daub some spots but not others. As a result, the level of player interaction in electronic bingo is even less than in non-electronic bingo and the level of competition between players is also reduced.

#### SUMMARY OF THE INVENTION

It is an object of the present invention to provide a method for playing a bingo-type game which overcomes the above-described shortcomings associated with the known forms of both electronic and non-electronic bingo games, by presenting the player with a strategic decision for at least a portion of the bingo balls that are drawn and that may be daubed on the player's card. It is still a further object of the present invention to provide visual indicia familiar to a large number of gaming patrons that will quickly and easily convey the strategic decisions available to the players of said bingo game.

Strategic decision or strategy as used herein is accorded its usual meaning in the gaming art and relates to decisions that can be made based on statistical probability and expected value to maximize a player's chance of success, even if the player is not completely aware of, or even misunderstands, the mathematical principals involved. In this context, strategic decision also refers to the decision by a player whether or not to daub a spot on his card when a corresponding ball is drawn based on any number of factors including the pays associated with various bingo patterns, the other balls that have been drawn, the number of balls remaining, etc. Penalty as used herein is also accorded its usual meaning in the gaming art, and more specifically, in the context of the present invention, means a player using or not using one daub on a spot that reduces the probability of a player completing at least one specific paying bingo pattern either because for instance, other balls required for any winning pattern were already, or will be disregarded (i.e., undaubed), or there are fewer daubs remaining to complete another more desirable pattern or the pattern involving the penalty daub is less desirable than another pattern. In this context, those skilled in the art will understand that a strategic decision that is

mathematically correct or optimal may involve not daubing a spot that is likely to result in a bingo win (or may even complete a winning bingo pattern at the very time the decision is made not to daub it) because the probabilities and payouts involved dictate that the player tries for a higher paying pattern. In this case, the failure to daub the spot is still a penalty, even though it was mathematically optimal (i.e., strategically correct) to incur the penalty.

The method of the present invention involves determining a first number of daubs to be used by a player and a first number of bingo balls to be drawn. The first number of daubs allotted to the player is preferably less than or equal to the first number of bingo balls to be drawn. Preferably the first number of daubs allotted and the first number of bingo balls drawn are determined well in advance of the players initiating the bingo game and remain constant from game to game. After the first number of balls are drawn, the players chose which if any of their first number of allotted daubs they will use to selectively daub spots matching the balls drawn. This determination should be made by each player in order to maximize each particular player's chances of success. After each player has made his daub selections, additional bingo balls may or may not be drawn. The drawing of additional balls may depend on whether a player achieved a game-ending bingo during the first selection. The spots matching the additional balls drawn after the first selection may be daubed automatically according to the number of remaining first allotted daubs that each player has after the first selection or these spots may again be selectively daubed by each player. At some point in the game, it may be desirable to rapidly provide bingo balls to the player that can be daubed without penalty.

It will also be preferable to offer a large variety of bingo patterns for the players to attempt. It will also be desirable for the prizes associated with each pattern to vary. Preferably the prize amounts will relate to the statistical probability of successfully completing the bingo pattern either in a certain number of drawn bingo balls or before other players complete a gameending bingo pattern.

Although the method of the present invention may be practiced in a non-electronic format, it will be appreciated by those skilled in the art that an electronic format will both facilitate the ease of play as well as dissuade and/or prevent players from attempting to cheat the game by altering their daub selections after additional balls are drawn. Also, although the present invention may be enjoyably played by a single player competing against only a computer opponent and/or a pay table when making his strategic decisions with respect to which balls to

daub, it is most preferred that players compete against each other in at least a portion of the game.

5

10

15

20

25

30

In its electronic format, the bingo game according to the present invention can associate traditional playing cards in a visual presentation that resembles poker. Preferably the poker game imitated will be one of the many popular five-card video draw poker games played in Las Vegas style casinos on stand-alone slot machines. In such an embodiment the traditional fiveby-five bingo matrix is changed to either a four-by-thirteen or four-by-fourteen matrix. Each of the four rows of the matrix is associated with one of the four suits used in poker – clubs. diamonds, hearts and spades. Each column is associated with a card ranking of 2 through Ace: in the four-by-fourteen version, the Ace will appear as both the first column and the last. (The general desirability of using a four-by-fourteen matrix to allow for both a "high" and a "low" Ace will be appreciated by those familiar with poker, and further reference herein to a poker-type bingo game using the present invention will make reference to a four-by-thirteen matrix generally, with the understanding that a four-by-fourteen matrix could also be used with little alteration of the underlying game.) On each player's bingo card matrix preferably only one number will be randomly assigned to the spots on the player's bingo card from the population that makes up the numbers appearing on the bingo balls available to be drawn in the bingo game. In this configuration it may be desirable to use 52 bingo balls rather than 75 and to randomly assign a number from 1 to 52 to each spot in the matrix. Thus, for every player, any ball drawn will result in the opportunity to daub exactly one spot on his bingo card.

In the version of the present invention that emulates five-card draw video poker, the bingo patterns used will correspond to traditional hands of poker and the payout for each pattern will approximately correspond with the payouts associated with traditional video poker. Thus, any horizontal line of five daubs on the four-by-thirteen bingo card would result in a payout of at least 50 credits for each credit bet and would provide the player with a visual indication of five cards of the same suit all in numerical succession, i.e., a straight flush. Each player would initially be allotted five daubs and the initial draw of bingo balls will also be five. After the five bingo balls are drawn, the player's terminal would preferably show the player the five balls and the corresponding spots on the player's card as well as the playing cards associated with each spot. The player would then be given the opportunity to selectively daub none, one, two, three, four or all of the spots on his card based on the initial draw. For each spot that is daubed, the

corresponding card would also be "held." After the player has determined which of the five spots he wishes to daub, he would hit a button signaling his desire to proceed with the drawing of additional bingo balls. After all the players enrolled in the bingo game have indicated their desire to draw the additional balls, the second draw will begin. As each ball is drawn in the second draw, each spot on each player's card corresponding to the drawn ball is automatically daubed until all of the player's remaining allotted daubs that were not used on the first round of drawn balls are used up. Thus, in this preferred embodiment, the second ball draw will never exceed five balls (the maximum number of remaining daubs being five if a player chose not to daub any spots during the first round).

After the second round of ball draws and automatic daubing is completed, each player's card is examined to determine if that player completed a winning bingo pattern using only the initial allotment of daubs, five. For the purposes of this evaluation, spots that were not daubed either because the player chose not to daub them during the initial round or because the player had already used up his allotment of daubs in or prior to the second round are ignored. For each player that completed a winning pattern using five or fewer daubs, a prize according to the predetermined prize table will be paid to the player. This may also constitute a game-ending bingo that will end the game. If no player completed a winning pattern using five or fewer daubs, the undaubed spots corresponding to previously drawn balls may also be reviewed or other balls may be drawn that will automatically be daubed using a second unlimited allotment of daubs until a predetermined game-ending bingo pattern occurs. These patterns may include, but are not limited to the patterns for which payouts are provided for the initial five daubs or fewer and will preferably payout much less than the patterns accomplished using the initial five daubs.

In an alternative form of the invention, each player has available to him two types of daubs. The first type of daub operates like standard bingo daubs, i.e., there is no penalty for daubing a spot and there is no strategic decision to be made when a player's bingo card contains a spot corresponding to a drawn ball. The second type of daub is either limited in number or is used to complete bingo patterns that have a payout dictated in part by the number of daubs used to complete the pattern. The player can chose whether or not to use the second type of daub when a spot on the player's bingo card corresponds to a drawn ball. Thus, this decision involves a strategic risk-reward decision and the possibility of a penalty.

These and other objects, advantages, and features of the invention will be apparent from the following description of the preferred embodiments, considered along with the accompanying drawings.

#### 5 BRIEF DESCRIPTION OF THE DRAWINGS

10

15

20

25

- FIG. 1 shows an electronic gaming terminal for playing a bingo game according to the method of the present invention.
- FIG. 2 is a schematic diagram of the electronic configuration of an embodiment of the gaming terminal shown in FIG. 1.
- FIG. 3 is a schematic diagram of a plurality of electronic gaming terminals connected to a network computer for playing a bingo game according to the method of the present invention.
  - FIGS. 4A-4C is a flow chart showing the steps according to one embodiment of the present invention.
- FIG. 5A-5C is a flow chart showing the steps according to an alternative embodiment of the present invention.
  - FIG. 6 shows a pay table that may be used in the present invention.
  - FIG. 7 shows a game of the present invention being played after the initial ball draw employing the pay table patterns defined in FIG. 6.
    - FIG. 8 shows the final result of the game initially depicted in FIG. 7.
- FIG. 9 shows an alternative pay table that may be used in the present invention and shows how bingo patterns may be associated with traditional poker hand rankings.
- FIG. 10 shows a game of the present invention being played by a first player after the initial ball draw employing the pay table patterns defined in FIG. 9.
- FIG. 11 shows a game of the present invention being played by a second player after the initial ball draw employing the pay table patterns defined in FIG. 9.
  - FIG. 12 shows the final result of the game initially depicted in FIG. 10.
  - FIG. 13 shows the final result of the game initially depicted in FIG. 11.

### 30 DETAILED DESCRIPTION OF THE INVENTION

FIG. 1 shows a player terminal or gaming device 100 for implementing the present invention. Gaming device 100 has the features of a conventional player terminal or slot machine. The gaming device 100 shown in FIG. 1 is what is commonly referred to as an electronic bingo terminal. FIG. 1 displays a bingo terminal that is very similar to an upright slot machine which the player can operate while standing or sitting. Most often the gaming device 100 is preferably mounted on a cabinet. (Not shown.) Although an up-right electronic bingo terminal 100 is shown in FIG. 1, it can be appreciated that the gaming device 100 can be any other style of gaming machine known in the art including, but not limited to a pub-style table-top or slant-top game in which a player can operate while sitting. The gaming device 100 can be constructed with varying cabinet and display designs.

Gaming device 100 may also include one or more display devices. The embodiment shown in FIG. 1 shows a central display 105 and an upper display 107. The upper display 107 may be used to show an electronic bingo game or a bonus game, while the central display 105 may display an electronic bingo game and/or ancillary visual indicia representing such games as slots, video poker, blackjack and/or keno. More specifically, the visual indicia could include, but is not limited to, playing cards and/or slot machine reels with symbols. The symbols and indicia used on and in gaming device 100 may be in mechanical, electrical, electronic or video form. The central display 105 in FIG. 1 shows both an electronic bingo game and visual indicia of playing cards.

It should be appreciated that the display devices may display any visual representation or exhibition, including but not limited to video images or movement of physical objects such as mechanical reels and wheels. The display devices can be a video monitor or screen, a liquid crystal display or any other display mechanism. Furthermore, it should be appreciated that these display devices preferably include touchscreens.

As shown in FIG. 1, gaming device 100 includes a wager accepting mechanism 110. The wager accepting mechanism 110 can be a bill acceptor. The wager accepting mechanism 110 can also accept other forms of payment including, but not limited to tickets, smart cards, debit cards and credit cards. With these other types of payment, other types of validators or readers other than a bill acceptor may be used. There is also a coin slot 120 on the gaming device 100 in which a player can insert coins or tokens.

Often, there is also a card reader 130. The card reader 130 may include any type of card reading device, such as a magnetic card reader or an optical card reader. The player will insert a card, such as a player tracking card or a credit card into the card reader 130 which will then read data from the card. The card reader 130 may be used to read and/or write from and/or to the inserted card.

After a player inserts money in the gaming device 100, either via the coin slot 120 or the wager accepting mechanism 110, a number of credits corresponding to the amount deposited is shown in a credit meter 140. After money is credited to the machine 100 and shown on the credit meter 140, the player then determines the wager amount. In order to facilitate the wager, the player may alternatively push a bet one credit button 170 repeatedly until the number of desired credits to be wagered is reached or may push a maximum bet button 150 which automatically allows the player to wager the maximum amount on the gaming device 100. As the player is selecting the wager amount, this wager amount is displayed on a bet display 160. As the bet display 160 amount is incrementing, the credit meter 140 amount is decreasing by the corresponding amount. In should be appreciated by anyone of known skill in the art that a player may also interact with the gaming device 100 by touching the appropriate marked regions on the displays 105 and 107 when the displays are equipped with touchscreens. Once the player has finalized his wager amount, the player may initiate play either by pressing a "Play" button or a "Draw/Continue Draw" button 145 or by touching the appropriate region on the displays 105 and 107.

To accomplish the selective daubing of the present invention, a number of daub buttons 155a, 155b, 155c, 155d, and 155e may be provided on the gaming device 100. Each daub button 155a, 155b, 155c, 155d, and 155e preferably corresponds to exactly one spot or exactly one corresponding bingo ball drawn. Alternatively the player may select which spots to daub using the touchscreen to either touch the spot or the corresponding ball. When the daub buttons 155a, 155b, 155c, 155d, and 155e are used, they are preferably visually aligned with the bingo balls they correspond with so that the player can expeditiously daub the desired spots/balls.

If the player has completed his play of the gaming device 100, and he still has a credit amount on the credit meter 140, the player may cash out. To cash out, the player will push a cash out button 180. Depending on the gaming device 100 configuration, the gaming device may pay out coins into a coin tray 190 corresponding to the amount shown on the credit meter 140.

Alternatively, the gaming device 100 may issue a ticket from the wager accepting mechanism 110 corresponding to the amount shown on the credit meter 140 or the gaming device 100 may electronically transfer the credit amount to a smart card or a player's account.

FIG. 2 is a block diagram of the general electronic configuration that may be incorporated in gaming device 100. The configuration preferably includes a processor 200. The processor 200 is preferably a microcontroller-based platform or microprocessor which is capable of displaying images, symbols and other indicia such as images of people, characters, places, things and faces of cards. One or more secondary processors may also be employed in conjunction with the primary processor to control certain aspects of the game function.

5

10

15

20

25

30

The gaming device 100 also includes a memory device 210 for storing program code or other data. This memory device 210 can include both read only memory (ROM) 205 and random access memory (RAM) 207. In addition to the memory device 210, the electronic configuration of the gaming device 100 may also include one or more input devices 220, one or more display devices 230, a sound card 240, and one or more speakers 250.

The input devices 220 include but is not limited to play button 145, bet one credit button 175, the daub buttons 155a, 155b, 155c, 155d, the max bet button 150 and the cash out button 180. In situations where a touch screen 260 is used, a touch screen controller 265 and touch screen 260 are connected to a video controller 270 and the processor 200.

Although FIG. 2 shows the processor 200 and memory device 210 residing on the gaming device 100, it should be appreciated that it is possible for both the processor 200 and memory device 210 to reside at a central location instead of at the gaming device 100. In such a situation, a network server may be used to communicate to a playing station over an Inernetnet connection, local area network (LAN), or wide area network (WAN). The processor 200 and memory device 210 are generally referred to herein as the controller.

FIG. 3 displays a gaming system 300 in which multiple gaming devices 100 are connected to a central or network computer 310 via a network data link or bus 320. The gaming system 300 may include a second group of gaming devices 100 which are connected to another central network computer (Not shown) via another network data link or bus (Not shown). The first and second gaming systems 300 may be coupled to one another via any type of network known in the art including, but not limited to the Internet, a wide area network (WAN), or a local area network (LAN).

When play is initiated, the processor randomly assigns a unique number from the appropriate group to each position in the bingo card. In an alternate embodiment, the player may chose the numbers assigned to each position on the card. Often, one or more positions are displayed as "free" indicating that the free position will always be treated as daubed for the game.

5

10

15

20

25

30

Turning now to FIG. 4A-4C and FIGS. 6 to 8, a first embodiment of the present invention will now be described in greater detail. In the embodiment that will be described, two different types of daubs, arbitrarily named special daubs and regular daubs, are used. Each type of daub may have its own associated bingo patterns, special patterns and regular patterns, that may be the same patterns or different. Each bingo pattern, whether special or regular, may have a different payout associated with it. FIGS. 4A-4C is a flowchart of one manner of operating the gaming routine. FIG. 6 is an image of a "See Pays" screen that may be displayed and used in conjunction with the manner of operation shown in FIGS. 4A-4C. FIGS. 7 and 8 show the information conveyed to the player by the video display device 105 and/or 107 at various points during the game.

Referring to FIG. 4A, the gaming routine may begin at block 401 at which the gaming system 300 loads the bingo patterns that will result in a pay as well as the amount of each pay. These pays may vary depending on the bingo game, the number of players playing and may also vary depending on the size of each individual player's wager. Although the patterns used for special daubs and regular daubs are the same in this example, this is a matter of convenience only and different patterns may be used for the two different sets of daubs. Preferably the pay information is relatively constant such that players can easily predict what patterns and associated pays they are playing for from game to game. The pattern and pay information may be communicated to the player via a see pays screen 601 as shown in FIG. 6. At block 403 the number of bingo balls to be used in the draw universe for the game is determined. Referring to FIG. 6, in the "rules" section 655 of the see pays screen 601, it is apparent that the total number of bingo balls available for drawing has been set to sixty. At block 405 the gaming system determines the number of allotted special daubs each player will initially receive. Referring to the rules section 655, it is apparent that for this game the number of special daubs has been set at eight. At block 407 a counter for tracking the number of bingo balls drawn, C, is set to zero and the number of balls to be drawn in the first draw is set. Again referring to the rules section 655,

it is apparent that the number of balls per draw has been set to eight. Although steps 401, 403, 405 and 407 relating to the setting of the bingo game's basic parameters are shown as coming before the enrollment of any player in block 409, it should be understood that this is not necessary. Indeed as already disclosed, in many applications, these parameters may change depending upon the number of players enrolled or the size of the various wagers enrolled. Thus, it should be understood that unless specifics of the invention dictate otherwise, the order of the steps performed is not relevant.

5

10

15

20

25

30

At block 409 a first player is enrolled in the game. In the electronic version of the game, it will be appreciated and understood by those familiar with the gaming art that enrolling a player in the game may include the steps of the player establishing credit at an electronic gaming terminal 100 by either depositing currency in the form of bills or coin or by using other valueaccepting mechanisms associated with the gaming terminal 100. These may include bill/ticket validator 110, coin slot 120 or card reader 130. Once credit is established, the player may enroll in the game by indicating the amount of his wager using various player input mechanisms and pressing start or draw button 145 or similar input means. After the first player is enrolled at block 409 the gaming system 300 waits for at least a second player to enroll at block 411. The gaming system may wait for additional players to enroll using algorithms well known in the electronic bingo art as indicated at block 413. These algorithms may be very simple, for instance waiting for a predetermined number of players, e.g., four, or waiting a predetermined amount of time to enroll as many players as possible, e.g., thirty seconds. Alternatively, the algorithms may be much more complex and may vary the number of players or the time window for enrollment based upon how many terminals are in active use across the gaming systems network. It may be desirable for the gaming system to communicate to the players the total number of enrolled players using display device 105 or 107 or some other communication device. Also during enrollment, each player may be issued at least one bingo card 700 similar to the one shown in FIG. 7. The bingo card will preferably have numbers corresponding to the available draw universe of bingo balls. The numbers will preferably be randomly distributed on the bingo card 700, but the player may be allowed to exercise a degree of control over the numbers he is assigned and how they are arranged using the various player input means provided. In the nonelectronic form of the invention, the step of enrolling players is typically performed by selling a player a bingo card that bears an indication of which bingo draw it is good for.

Referring again to FIG. 4A, at block 417 another game parameter is set. In this example, block 417 turns autodaub ON for regular daubs ("Regular Autodaub") and turns autodaub OFF for special daubs ("Special Autodaub"). As will be seen, setting these two autodaub features in this fashion will result in two bingo games being played simultaneously. In the first game dealing with regular daubs, all of the spots 709 on each player's card 700 corresponding to a drawn bingo ball will automatically be daubed until one player achieves a regular bingo pattern (which may also be referred to as a game-ending bingo pattern), at which point the regular aspect of the bingo game will be terminated. In the second game dealing with special daubs, the player will initially be given the option of which of the available spots 709 to daub as groups of bingo balls are drawn. But in subsequent draws, the player's remaining special daubs that were unused in the initial draw or draws will be automatically used in an autodaub format for the subsequent spots until such time as each player's allotted special daubs are completely used.

Autodaub or automatically daubed as used herein refers to any electronic means that automatically keeps track of spots available for daubing on a player's bingo card 700 and that daubs all of these available spots without giving the player the option to daub some individually selectable subset of the spots. Some forms of autodaub being used in electronic bingo games today require a player to periodically hit a button to initiate an autodaub. Upon doing so, all spots available at that time are daubed. The player may have to hit this button to initiate the autodaub on later occasions throughout the game to effectuate a daubing of spots that match with newly drawn balls. Although such routines allow a player to selectively autodaub groups of available spots, they do not allow a player to daub some of the spots in these groups and not others, nor do they allow a player to daub the spots in one subsequent group but not the spots in a previous group. Therefore, each such application is still within the meaning of autodaub as used herein.

At block 420 a bingo ball is drawn by the network computer 310 and communicated to each player's game terminal 100. Each player's game terminal 100 will display the drawn ball in a ball display area 710, e.g., ball display icon 720 on FIG. 7. In FIG. 4B at block 421 C is incremented by one to reflect that a ball has been drawn. At block 422 the gaming routine determines if there is a match between the recently drawn ball and any of the spots on each player's bingo card 700. Preferably this operation is carried out by the processor 200 in the individual gaming terminals 100 and communicated to the network computer 310. When there is

a match, the gaming terminal's display device 105 or 107 preferably may provide a visual indication of such by highlighting the available spot 709 on the player's bingo card 700 and/or by highlighting the ball display icon 720 in the ball display area 710. Of course, a variety of visual indications may be used. At block 424, the game routine determines if Regular Autodaub is ON. If it is ON, this indicates that a regular bingo pattern has not yet been formed using regular daubs. If Regular Autodaub is OFF, no daubing of regular spots can occur in the embodiment shown and the gaming routine will proceed to block 433 dealing with special daubs. Preferably the Regular Autodaub function is set the same at all times for all gaming terminals 100 playing the bingo game. Thus, in this embodiment the player's are competing against each other to be the first to complete a regular bingo pattern using regular daubs. Assuming that Regular Autodaub is ON, the matching spot 709 on each player's bingo card 700 is daubed with a regular daub as indicated at block 426. At block 428, the logic of the gaming system determines if the last ball drawn completes a regular bingo pattern using regular daubs. If it does, the player or players (if multiple patterns are completed using the same final ball) are paid for the regular pattern win at block 430. In order not to interrupt the flow of the game, it may be desirable to provide the win to the player at the ultimate end of the game, however. After a pattern has been completed with regular daubs, the Regular Autodaub is turned OFF at block 432.

5

10

15

20

25

30

After the gaming routine of the present invention has dealt with application of regular daubs, it proceeds to block 433, which begins the portion dealing with special daubs. At block 433 the routine determines if there are any unused special daubs remaining. The determination of whether a player has any special daubs remaining unused will preferably be made by the processor 200 in each individual player's game terminal 100 as the usage of the special daubs is intended to be a strategic decision made by each individual player. If there are remaining unused special daubs (i.e., if X > 0), the routine proceeds to block 434 to determine whether Special Autodaub is ON. Because this parameter is preferably set to OFF in block 417 at the beginning of the game, the routine will initially proceed to logic block 436. At block 436 the routine determines if the last drawn ball completes the set of balls to be drawn (i.e., if Y = C). If it does not, additional balls are preferably drawn to complete the set.

If the last drawn ball does complete a selectable set, the gaming routine proceeds to block 438 where the player is then allowed to use some, none or all of his special daubs on the balls in

the set. Referring now to FIG. 7, the terminal's display screens 105 or 107 may at this point display a message 730 notifying the player that he may now make his selection. As previously discussed the balls in the set that have been drawn 720, 721, 722, 723, 724, 725, 726 and 727 are also preferably displayed and the balls in this set 720, 721, 722, 724, 725, 726 and 727 that concord with a spot on the player's bingo card 700 are preferably highlighted in some fashion as are the matching spots 709 on the player's bingo card. The player may make his selection by using a touchscreen, light pen, buttons or the like to indicate either the available spots 709 or the matching ball display icons (ball display icons 720, 721, 722, 723, 724, 725, 726 and 727). After a player has made his selections and is satisfied with them, he preferably actuates a "Continue Draw" button 145 that indicates his desire to proceed with the bingo game. At this time the player's allotment of special daubs is reduced by the number just used as indicated at block 440.

5

10

15

20

25

30

At block 442 the Special Autodaub is switched to ON. This signifies that at this point in the game, any remaining special daubs will automatically be used on any additional available spots as additional balls are drawn without giving the player the option to strategically decide not to daub them. It will be appreciated by those familiar with gaming that it may be desirable to determine if any player has completed a special bingo pattern using special daubs as soon as the Continue Draw button 145 is activated. In some alternative embodiments, only the first player to complete a special bingo pattern with special daubs may receive an award to heighten the competition amongst the players. Also, it will be appreciated that a player may be allotted more than eight special daubs, but then because balls are drawn in sets of eight, it may be possible for a player to have more than eight special daubs remaining after the first set is evaluated. In such a situation, it may be desirable to draw another set of eight balls and allow the player to strategically decide for which of the resulting available spots to use special daubs. Thus, in this alternative embodiment the Special Autodaub in not set to ON until the player has fewer special daubs remaining than the number of balls drawn per set. Alternatively, the Special Autodaub can be set to ON after a predetermined number of ball sets other than the first one have been drawn. Setting Special Autodaub to ON can optionally be done either on an individual gaming terminal 100 or across all gaming terminals 100 playing the current bingo game by the network computer 310. It will be appreciated by those skilled in the art that the options of only awarding the first special bingo pattern formed with special daubs, allowing Special Autodaub to remain OFF for a second (or further) set of balls and allowing Special Autodaub to be switched to ON

for some terminals but not others can be used in various combinations to provide players a variety of interesting and entertaining options. Each option offers a different strategy and level of competition between the players.

5

10

15

20

25

30

After the Special Autodaub is turned ON, additional available spots will be automatically daubed as indicated at block 444 until the number of special daubs remaining is reduced to zero via block 446. Referring now to FIG. 4C and to logic blocks 448 and 452, collectively these blocks determine whether additional balls need to be drawn either to ensure at least one player completes a regular pattern with regular daubs or to allow each player to use his allotment of special daubs. Of course, in the alternative embodiments discussed in the foregoing paragraph where there is no guarantee that a player will use all of his special daubs or where players compete to be the first to complete a special bingo pattern using special daubs, block 448 is adjusted accordingly. At logic block 454 the gaming routine determines if a player has completed a special bingo pattern using special daubs and if so, pays the player for the special win at block 456.

Referring now to FIG. 8, it is apparent that the player chose to use special daubs on available spots 840 but not on available spots 850 and 851 when given the opportunity in the flowchart at block 438. To signify that available spots 850 and 851 have been marked with regular daubs, but not special daubs, different graphic patterns may be used on the bingo card 700 and in the section of the video display 105 or 107 showing the drawn balls 710. In the instant example a regular daub is indicated by a / hash mark, a special daub is indicated by a \ hash mark and a spot with both daubs is indicated by an X. The decision not to daub the spot corresponding to drawn ball number fifty three 850 is mathematically and strategically the correct choice because the most likely pattern spot 850 would be used to complete is the diagonal traversing from the upper right corner to the lower left corner. To complete this pattern, the player needs ball number forty. However, if ball number forty is drawn, the player would also complete a kite pattern resulting from balls four 720, fourteen 721, twenty-one 725 and seven 724 as well as the "Free Space" in the center of the five-by-five matrix. As the kite pattern pays a greater number of credits the diagonal pattern would be ignored per the rules in FIG. 6. Because the player chose not to daub the spot corresponding to ball number fifty-three 850, it was also logical for the player to not daub the spot corresponding to ball number fifty-two 851.

Note that the player also chose to daub the spot corresponding to ball number one 853. Based on the pay table shown in FIG. 6 and the statistical expected value of this decision, this was not the mathematically optimal play. The odds of this spot being used to complete the bottom-left to top-right diagonal with three special daubs remaining is 0.005%. The odds of this spot being used to complete the vertical line in the B column 701 is 0.226% and the odds of the player catching ball number 40 to complete the kite with three special daubs remaining (the number of daubs the would remain if the spot 853 is daubed) is 5.769%. Thus, the expected value of daubing this spot is 0.00005 X 3 (the pay for a diagonal) + 0.00226 X 7 (the pay for a vertical) + 0.05769 X 10 (the pay for a kite), or 0.5929. Whereas, the expected value that the player would receive just for the kite alone, if he had four special daubs in which to complete it, is 7.692% X 10, or 0.7692. Thus, by daubing the spot 853 associated with the one ball, the player lost over 0.1763 in expected value. Although this may constitute an error in mathematical strategy, it is still a strategic decision as contemplated by the invention.

5

10

15

20

25

30

Again referring to FIG. 8, the outcome of the decisions that the player made at block 438 in the game routine after the initial eight bingo balls were drawn can now be determined. The player's bingo card 700 contained spots corresponding to the next three bingo balls drawn in the second drawing as indicated by ball icons 828, 829 and 830. Therefore these spots were autodaubed with regular daubs as indicated at block 426 and with special daubs as indicated at block 444. The player's remaining number of special daubs was reduced by one for each spot at block 446. Thus the first three ball drawn in the second draw used up all of the player's allotted special daubs. It will be appreciated that in an alternative embodiment, it may be desirable once the Special Autodaub is ON to reduce the player's number of special daubs by one for every ball drawn, regardless of whether there is a match between the drawn ball and a spot on the player's bingo card 700. Because the first three spots 845 that were covered using the player's remaining special daubs did not complete a special bingo pattern, the player did not receive any special pays. However, the fourth bingo ball drawn in the second drawing as indicated by ball icon 831 was ball number forty. The spot 852 matching ball number forty was autodaubed with a regular daub as indicated at block 426 and completed the pattern forming a kite using regular daubs. And because the Regular Autodaub was still set to ON, indicating no other player had yet formed a regular bingo pattern, the player would be awarded five credits at block 430 as indicated by the pay table shown in FIG. 6. Note had the player not used a special daub to daub spot 853

corresponding to bingo ball number one, the drawing of bingo ball number forty would have also completed a special bingo pattern using special daubs, in which case the player may have been awarded both ten credits for the special win and five credits for the regular win. Alternatively, the rules for the game may be adjusted so that the player is only awarded for a single win, in this case the ten credits for the special win, as the highest win, would be the preferred payout.

5

10

15

20

25

30

Using the same principles of expected value demonstrated above, it will be appreciated by those skilled in the art that once the number of players in a given bingo game is known, the total expected value for any given player at any time can be determined or approximated by reviewing the rules of the game, particularly those displayed in FIG. 6, and the status of the ball draw compared to each player's bingo card 700. Further, it will be appreciated that the expected value will be comprised of two components. The first component comes from the bingo pays that use regular daubs and is therefore entirely based on luck. The second component comes from the bingo pays that use special daubs and is therefore based at least in part on the player's strategic decisions as well as luck. By adjusting the payouts for the various patterns, the expected value of both the regular pays and the special pays can easily be adjusted. Preferably the two components when added together will produce an expected value greater than 0.75 but less than 1.00 (because an expected value above 1.00 would mean that with perfect strategy, the house may lose money in the long term). Furthermore, most preferably the total expected value will be greater than 0.95, of which more than 0.90 is attributable to the special pays. In terms of a ratio the expected value of the special pays to the expected value of the regular pays will be greater than approximately 20:1, and most preferably greater than approximately 40:1.

It will be appreciated that in addition to the variations to the gaming routine described in FIGS. 4A-4C that have already been disclosed, other variations are made possible merely by adjusting the parameters of the game such as the number of allotted special daubs set at block 405 and the number of bingo balls drawn per group set at block 407. For instance, in one alternative embodiment the number of allotted special daubs could randomly change at some point in the game. This would in turn alter the expected value of special daubs that the player could have used, but chose to save. Also, it may be possible to allow the player to "purchase" additional special daubs at some point in the game by increasing his wager. The "price" of these special daubs need not be constant and could change in either a predictable or random manner. Preferably, the price of the special daubs would increase as the game is played. Thus, referring

to the example shown in FIG. 6, one credit initially purchases eight special daubs. Therefore, in this alternative embodiment it would be preferable to allow the player to purchase less than eight special daubs for one credit. Additional special daubs could be purchased either one at a time or in groups. Also, by changing the number of bingo balls drawn per group, the decisions made by the player would significantly change. For instance if Y is set to one at block 407, the player may be presented with only one bingo ball at a time and would have to decide whether to daub it based on which balls were previously drawn without seeing any other balls that will be drawn. While if Y is greater than one, the player gets to evaluate a larger group of balls, but may be limited to selecting only one ball out of each group by resetting the allotted special daubs to one before each group of balls is drawn.

Referring now to the flowchart in FIGS. 5A-5C and FIGS. 9 to 12, another alternative embodiment will now be described. Among the features of this embodiment that differ from the embodiment described in FIGS. 4A-4C is that there is only one type of daub. The player is initially limited to the number of daubs he is allotted, but if no player completes a game-ending pattern in the allotted daubs, additional daubs are allotted to every player and autodaubed as additional balls are drawn until there is at least one winner. In this embodiment a great premium may be paid for completing a pattern in the original allotment of balls. Also different from the embodiment previously described is the addition of ancillary indicia, in the form of playing cards, that are not traditionally associated with the game of bingo. In addition to providing the player with additional visual stimulus, the playing cards allow the player to quickly and more accurately evaluate the strategic decisions available to the player after the initial group of bingo balls is drawn.

In FIG. 5A, at block 560 the gaming routine of the present embodiment may be initiated by loading the pay table information shown in FIG. 9. At block 561 the total universe of bingo balls to be used in the game is set at fifty-two balls numbered one to fifty-two. At block 562 the number of daubs originally allotted to the player is set at five and at block 563 the number of balls to be drawn in the initial group is set to five. It is understood that, as was done in FIGS. 4A-4C, each of these values can be replaced with a variable and data structure that is easily changed from game to game.

At block 564 the gaming system enrolls the first player by accepting a wager at the player's gaming terminal 100. As part of the enrollment process the gaming system may

randomly distribute numbers one to fifty-two in the matrix of the first player's bingo card 900 at block 565 as shown in FIG. 10. The random creation of the bingo card 900 may be done locally by the gaming terminal 100 or by the network computer 310. In either case it is preferable that the gaming system ensures that no two players' bingo cards 900 are identical. At blocks 566 and 567 the gaming system enrolls an additional player by accepting a wager at an additional gaming terminal 100 and randomly generates an additional bingo card 960 as shown in FIG. 11. As in block 413 in FIG. 4, the gaming system may wait to enroll other players at block 568.

5

10

15

20

25

30

After all players have been enrolled, the gaming system draws the first group of five bingo balls at block 570. Corresponding ball icons 905, 906, 907, 908 and 909 are displayed on the video display 105 or 107 of each player's gaming terminal 100. Additionally, as indicated at block 572, based on the matrix position of the spot, if any, corresponding to each drawn ball, a playing card is also displayed on the video display 105 of each player's gaming terminal 100. The suit of the card (i.e., Spades, Diamonds, Hearts or Clubs) is determined by assigning each of the four rows 930, 931, 932 and 933 of the bingo card 900 a suit. Similarly, the rank of the card (i.e., two through ten, jack, queen, king and ace) is determined by assigning each column of the player's bingo card 900 a corresponding rank. Preferably, the rank associated with each column and the suit associated with each row is in a logical order and is constant from game to game. Referring now to FIG. 10, it can be seen that the first five balls drawn were, in order of drawing, the seven ball, the twenty-three ball, the eight ball, the fourteen ball and the fifty-two ball. These balls correspond to spots 950, 951, 953, 952 and 954 respectively of the player's bingo card 900. Therefore, the gaming terminal generates cards showing the Five of Hearts 910, the Eight of Clubs 911, the Queen of Hearts 912, the Ten of Diamonds 913 and the Queen of Clubs 914. Referring now to FIG. 11, it is apparent that these same five bingo balls represent different playing cards on another player's bingo card 960, specifically the Six of Clubs 915, the Six of Diamonds 916, the Four of Diamonds 917, the Five of Diamonds 918 and the Three of Diamonds 919. The difference in the playing cards displayed in FIG. 10 and FIG. 11 is attributable to the different distribution of numbers on the two player's bingo cards 900 and 960.

It will be appreciated that because there are only fifty-two bingo balls in the total universe and because each bingo card has fifty-two spots in its matrix, there is no need to check for a match between the matrix and the drawn ball, as was done at block 422 in FIG. 4. Of

course, if the parameters of the instant bingo game were changed, this step could be easily inserted.

At this point in the game represented by block 574, each player is allowed to make strategic decisions by selectively daubing between none and all of the five spots 950, 951, 953, 952 and 954 on his bingo card 900 that correspond to the five bingo balls drawn. This may be done by touching the spots 950, 951, 953, 952 and 954, the bingo ball icons 905, 906, 907, 908 and 909 or the corresponding cards 910, 911, 912, 913 and 914 on the gaming terminal's video display 105. Also, the player may daub spots by depressing one or more of the corresponding "Daub" buttons 155a, 155b, 155c, 155d and 155e on the gaming terminal 100. Preferably these buttons 155a, 155b, 155c, 155d and 155e are generally aligned on the gaming terminal 100 beneath the five bingo ball icons 905, 906, 907, 908 and 909 and/or corresponding playing cards 910, 911, 912, 913 and 914 displayed on the video display 105.

After the player is happy with his usage of allotted daubs on the first group of bingo balls drawn, he presses the Continue Draw button 145. At block 576 each player's number of allotted daubs is reduced by the number of daubs just used. Once all enrolled players have indicated their desire to continue with the draw, the gaming system proceeds to block 578. At block 578 the gaming terminal 100 removes the undaubed bingo ball icons 905, 906, and 908 as well as the associated playing cards 910, 911, and 913 from the video display. In an alternative embodiment, it may be desirable to retain on the video display 105 or 107 a record of all bingo balls that were drawn even if they were not daubed. It may also be preferred to rearrange some of the graphics shown to the player on the video display 105 to more easily advise the player of the results of his strategic decisions as shown in FIG. 12.

At block 580 the gaming system initiates the draw of the second group of bingo balls. For simplicity the second group of balls may be the same size as the first group of balls drawn, even though it will often be unnecessary to display the entire second group of balls to the players. At block 582 each gaming terminal 100 displays only the first X balls of the second group, where X is equal to the number of allotted daubs that each individual player has remaining. Also displayed to the player are the playing cards associated with each displayed ball from the second draw. Thus, it will be appreciated that the number of balls from the second drawing that will initially be displayed on each player's gaming terminal 100 may vary from terminal to terminal. For instance, referring to FIGS. 12 and 13, the player viewing the video

display 105 corresponding to FIG. 12 is initially shown ball icons 920, 921 and 922 while the player viewing the video display 105 corresponding to FIG. 13 is simultaneously shown only ball icon 920. Each spot corresponding to the initially shown balls drawn in the second drawing is autodaubed for individual players as indicated at block 584.

At block 586 the pattern formed by the balls selectively daubed by the player from the first draw as well as the balls initially displayed from the second group that were autodaubed are evaluated to determine if the player has formed a winning bingo pattern. If the player has, the player is paid for the win at block 588. At block 590 the network computer 310, in communication with the gaming terminals 100, determines which player completed a paying bingo pattern first. "First" as used herein preferably refers to the completion of a bingo pattern using the nth ball drawn, as is typical in electronic and non-electronic bingo games known today. However, in alternative embodiments, "first" may also mean completing a bingo pattern in the fewest daubs or fewest selective daubs (as opposed to autodaubs) or may mean temporally completing the pattern first by being the first player to complete a pattern and press the Continue Draw button 145. At block 592 the player who first completed a winning pattern is awarded an additional payout based on the pay table shown in FIG. 9.

If no player enrolled in the current game completes a bingo pattern in the allotted five daubs, the gaming system proceeds to block 594. At block 594 additional bingo balls are drawn and autodaubed on each player's bingo card 900 or 960 until the first winning pattern is formed and detected at logic block 596. The first "draw" of additional balls may involve revealing balls drawn in the second group draw that were initially not displayed on one or more player's game terminal 100 one at a time. If no bingo pattern is completed in this fashion, or if in an alternative embodiment the undisplayed balls from the second group draw are ignored, the network computer 310 may draw balls one at a time from the remaining forty-two balls until a bingo pattern is completed. Once a bingo pattern is completed and detected at block 598 the player completing the pattern is paid for a First Pay win as indicated on the pay table shown at FIG. 9 and the game is ended. In some embodiments it may be desirable to require the player who wins the First Pay to interact with gaming terminal 100 in some fashion, for instance by hitting a "Collect Win" button 145. Failure to do so in a given amount of time may result in the player "sleeping" his win away, in which case the gaming system 300 will ignore this first win and continue drawing balls until a second player receives a first win.

Referring now to FIG. 12 and FIG. 13, the end results of the game can now be analyzed and the payouts received by each player can be explained. Focusing first on FIG. 12, the player chose at block 574 to daub spots 953 and 954. These spots are both in the eleventh column. Therefore this player had already completed the bingo pattern that pays one credit on the Standard Pay table and 1/100<sup>th</sup> of a credit on the First Pay table (i.e., two spots in the same column, where the column is the 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup> or 13<sup>th</sup> column). Assuming that no other player completed a bingo pattern by the fifth ball (i.e., the last ball of the first draw) the player would already be entitled to the First Pay. However, because the player only used two of his allotted daubs, he received three additional bingo balls in the second ball draw indicated at block 580. The first three balls drawn in the second ball draw were balls numbered twenty-six, twenty-two and thirty-six as indicated by ball icons 920, 921 and 922. The three playing cards associated with the spots matching these balls for the player playing the game represented at FIG. 12 are the Six of Clubs 923, the Six of Spades 924, and the Eight of Spades 925. Thus, when the player's bingo card 900 is evaluated at block 586, the player has completed a pattern of two spots in one column and two spots in another column and receives a pay of two credits, see FIG. 9. The collection of the five displayed playing cards forms a poker-hand ranking of two pair - Queens and Sixes.

5

10

15

20

25

30

Turning to FIG. 13, the second player chose at block 574 to daub spots 961, 962, 963 and 964, thereby using four of his five allotted daubs. Therefore, the second player only receives the first ball of the second ball draw, as indicated by ball icon 920. The spot 966 matching to ball number twenty-six completes the bingo pattern of one spot in each of five consecutive columns, for which the player is paid five credits. Referring to the player's bingo card 960, the playing card associated with the fifth daubed spot 966 is the Seven of Clubs 926. This playing card thus completes a seven-high straight.

As with the first embodiment discussed, it is understood that a number of modifications to this embodiment could be made without altering the essence of the invention, such as only paying a Standard Pay for the first bingo pattern formed amongst all the enrolled players or by adjusting the number of balls in play or altering the various pay tables.

Those familiar with the art of video poker as well as statistics will understand that the foregoing embodiment nearly perfectly matches the mathematical principles at work in video poker. The only exception being that in the four-by-thirteen matrix used in the example, the Ace

must play either high or low. In the described and preferred embodiment the Ace plays high. This minor irregularity could of course be rectified by including a fourteenth column for a low Ace. Preferably the bingo ball numbers in this fourteenth column would exactly match the numbers in the column for the high Ace. Thus, the bingo pay table shown in FIG. 9 nearly perfectly approximates the pay table for the popular video poker game known as 9/6 Jacks or Better. The probability and expected value of each hand in the 9/6 Jacks or Better game is represented by the table below:

5

10

Hand	Probability	Payout	Expected Return
Royal Flush	0.00%*	800**	0.0198
Straight Flush	0.01%	50	0.0055
4 of a Kind	0.24%	25	0.0591
Full House	1.15%	9	0.1036
Flush	1.10%	6	0.0661
Straight	1.12%	5	0.0449
3 of a Kind	7.45%	3	0.2233
Two Pair	12.93%	2	0.2586
Jacks or Better	21.46%	1	0.2146
TOTAL	45.46%	n/a	0.9955

<sup>\*</sup> The probability of a Royal Flush occurring is about one in 40,390 hands.

In order to keep the expected value or expected return of the Standard Pay and First Pay portion of the game below 1.00, it is therefore necessary to limit the expected return of the First Pay portion to less than 0.0045. In the preferred embodiment represented by FIG. 9, the probability of a First Pay win is approximately 50% when there are only two players enrolled. Therefore, the expected return of the First Pay win is 0.005. Although this yields a total expected return for the game of 1.0005, it will be appreciated by those familiar with the video

<sup>\*\*</sup> In an alternative embodiment, one or more payouts may be based on a progressive jackpot that increments over time, as is known in the gaming art. When such a progressive is used, it is most preferably paid for the most difficult pattern to complete, in this case the pattern corresponding to a Royal Flush.

poker art that because players typically make strategy mistakes a game with an expected return of 1.0005 could be profitably deployed by a casino or other gaming establishment. As an alternative to awarding 1/100 of a credit for the First Pay, the expected return of the First Pay may be modified by requiring more players to enroll before the game is initiated. For instance, if two hundred players are required to enroll before the game begins, each First Pay could pay one credit, resulting in a probability of approximately 0.5% for an expected return of 0.005. As with the first embodiment explained with reference to FIGS. 4A-4C, the First Pays in this embodiment need not be all of the same value nor do the patterns associated with the First Pays need to be the same as the patterns associated with the Standard Pays. It is also possible to lower the expected return for the Standard Pays by, for example, reducing the amount paid for a bingo pattern having three spots in one column and two spots in another column (i.e., a full house) from nine to eight and reducing the pay for five spots in one row (i.e., a flush) from six to five. This would lower the expected return of the Standard Pays to approximately 97% or 0.97. However, in the most preferred embodiment of the invention, the expected return of the Standard Pays is not lowered significantly (e.g., more than 2%) below the expected return of the Las Vegas style video poker machines that the strategy based portion of the bingo game is emulating. Therefore the ratio of the expected return from the Standard Pays to that of the First Pays will preferably be greater than or equal to approximately 16:1 and also preferably greater than approximately 32:1 and most preferably greater than 100:1.

5

10

15

20

25

30

It should be appreciated that the step of associating each spot on the player's bingo card 900 with a particular playing card has at least two significant advantages for the present invention. First, it allows complicated pay table information for the underlying game of bingo to be expressed very succinctly. For instance, for the bingo pattern corresponding to a full house—three spots in one column and two spots in another column—there are 936 different bingo patterns in a four-by-thirteen matrix that would meet this requirement. The need to visually depict each of these patterns in a See Pay's screen is negated by the gaming public's general familiarity with what a full house looks like when playing the game of video poker. The second, and somewhat related benefit, is that by associating a playing card with each spot that is available for daubing, a great deal of information is being conveyed to the player about his chances of success in the game based on the instant ball in question without the player having to consult a rather complicated four-by-thirteen matrix to determine what other balls may have also

been drawn in the instant ball's corresponding row or column or in adjacent columns. By associating a single playing card with each spot on the bingo card's matrix, the player can tell by looking at each playing card, what row and column the corresponding spot is in in the matrix. Additionally, by comparing the ranks and suits of the other displayed playing cards, the player can tell if additional spots may be daubed that are in the same row or column or an adjacent/near by row or column. Not only does this alleviate the need to review the accompanying drawn balls in the form of the matrix, but it also eliminates the need for the player to review the aforementioned complicated and large number of different visual bingo patterns that may be completed using any one given ball.

5

10

15

20

25

30

Playing a bingo game of the present invention, it is possible to incorporate nearly all of the features that are currently popular in Las Vegas style video poker games. For instance, one of the most popular video poker innovations of the last ten years is multi-handed video poker as described in U.S. Patent Number 5,823,873 incorporated herein by reference. The most popular embodiment of the '873 patent is a video poker game commonly known as Triple Play® poker. In Triple Play® poker a player is dealt one video poker hand and the cards that the player wishes to hold in the first hand are also used in a second and possibly third hand. This type of poker game could easily be converted to the last embodiment of the invention disclosed herein by allowing the player to purchase multiple bingo cards, but initially displaying just a single bingo card 900. After the player makes his initial daub decisions at block 574, the gaming terminal creates the additional bingo cards that were previously purchased. However, unlike the first bingo card 900 that had all fifty-two spots randomly assigned a number, the additional cards will maintain the five spots that match to the first five bingo balls drawn and will mark any of these spots as daubed if they were daubed on the original card. The remaining forty-seven bingo numbers will then be randomly distributed in the matrix of the additional bingo cards. It would also be a simple matter to incorporate "wild" spots into the matrix or multiplier spots into the matrix that double the pay table, thus approximating wild cards and multiplier jokers.

While this invention has been described with respect to several specific embodiments thereof, it should be understood that the invention is not limited to the disclosed embodiments, but rather that the invention is intended to cover various modifications and equivalent arrangements which will be apparent to those skilled in the art. It is thus to be understood that the invention should not be limited by the description, and that modifications and variations in

the present invention may be made without departing from the novel aspects of this invention as defined in the claims.